

REMARKS/ARGUMENTS

Claims 1-55 were pending of which Claims 1-55 were rejected. Claims 1-7, 14, 21-24, 34, 38, 39, 48, and 51 have been amended and Claims 17, 18, 19, 34, 35, 36, 40, 41, and 42 have been cancelled.

Specifically, Claim 1 and 2 have been amended to include the limitations of Claim 17 and have been amended to recite "storing each of said plurality of portions in a standard television video frame" (emphasis added). These amendments are supported by at least original Claims 1, 2, and 17 and Figures 4A-4D, which show the portions of an panoramic image stored in a standard television video frame.

Claim 3 is amended to recite "receiving a standard television video frame containing one of a plurality of immersive video frames" and "wherein said one of a plurality of immersive video frames is apportioned into a plurality of portions in said standard television video frame". These amendments are supported by at least original Claim 3 and Figures 4A-4D, which show the portions of a panoramic image stored in a standard television video frame.

Claims 4-7 and 14 are amended to reconcile the changes in Amended Claims 1 and 2. These amendments are supported by the original Claims.

Claims 21 and 22 have been amended to include the limitations of Claim 34 and have been amended to recite "to store each of said plurality of portions in a standard television video frame" (emphasis added). These amendments are supported by at least original Claims 21, 22, and 34 and Figures 4A-4D, which show the portions of a panoramic image stored in a standard television video frame.

Claim 23 is amended to recite "to receive a standard television video frame containing one of a plurality of immersive video frames" and "wherein said one of a plurality of immersive video frames is apportioned into a plurality of portions in said standard television video frame;". These amendments are supported by at least original Claim 23 and Figures 4A-4D, which show the portions of a panoramic image stored in a standard television video frame.

Claims 24 and 31 are amended to reconcile the changes in Amended Claims 21 and 22. These amendments are supported by the original Claims.

Claim 38, has been amended to include the limitations of Claim 40 and have been amended to recite "to store each of said plurality of portions in a standard television video frame" (emphasis added). These amendments are supported by at least original Claims 38 and 40 and Figures 4A-4D, which show the portions of a panoramic image stored in a standard television video frame.

Claims 39 are amended to reconcile the changes in Amended Claims 38. These amendments are supported by the original Claims.

Claim 48 is amended to recite "said standard television video frame, containing one of a plurality of immersive video frames" and "wherein said one of a plurality of immersive video frames is apportioned into a plurality of portions in said standard television video frame;". These amendments are supported by at least original Claim 23 and Figures 4A-4D, which show the portions of a panoramic image stored in a standard television video frame.

No new matter is added.

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Claim Rejections - 35 U.S.C. §102

Claims 1-8, 11, 13-16, 20-25, 28, 30-33, 37-39, 43-44, 47-489, and 50-53 "were rejected under 35 U.S.C. 102(b) as being anticipated by Driscoll, Jr. et al (USP 6,043,837)." The Examiner stated that the process in Driscoll "is accomplished using warping and scaling of the panoramic image and not by splitting the image into multiple sections (as will be discussed below in the Fraser reference. Because the independent claims have been amended to include apportionment of the immersive video frame. Applicant respectfully submit that the rejection of the claims under 35. U.S.C. 102(b) is rendered moot. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection.

Claim Rejections - 35 U.S.C. §103

Claims 9-10, 12, 26-27, 29, 45-46, 49, and 54-55 were rejected "under 35 U.S.C. 103(a) as being unpatentable over Driscoll, Jr. et al." As explained above, the independent claims from which these claims depend have been amended. Thus Applicants, respectfully submit that this rejection under 35 U.S.C. 103(a) has been rendered moot. Accordingly, Applicants respectfully request reconsideration and withdrawal of this rejection under 35 U.S.C. 103(a).

Claims 17-19, 34-36, and 40-42 were "rejected under 35 U.S.C. (103(a) as being unpatentable over Driscoll, Jr. et al (USP 6,043,837), cited by applicant, in view of Fraser et al (USP 5,430,486), cited by Examiner." Claims 18-19, 35-36, and 41-42 are cancelled in this amendment. Therefore, Applicants respectfully submit that the rejection of Claims 18-19, 35-36, and 41-42 are rendered moot. The limitations of Claims 17 have been incorporated into Claims 1, 2, the limitations of Claim 34 have

been incorporated into Claims 21 and 22, and the limitations of Claim 40 has been incorporated into Claim 38. However, the claims have also been amended with additional limitations which render the Examiner's rejections moot in light of the arguments presented below with respect to the amended Claims.

Patentability of The Claims

Claims 1 and 2 have been amended to recite:

apportioning said one of said plurality
of immersive video frames into a plurality
of portions;
storing each of said plurality of
portions in a standard television video
frame

As the Examiner stated, Driscoll does not apportion the immersive video frames into a plurality of portions. As cited by the Examiner, Fraser et al teaches "individual image segments of high resolution image 15 are encoded into standard television format frames 1-9 and stored or transmitted sequentially." (Fraser, et al., Col. 2, lines 34-37. Thus, Fraser, et al., teaches to divide the high-resolution image into multiple television frames. However, Claims 1 and 2 recite "storing each of said plurality of portions in a standard television video frame". Thus, Applicants respectfully submit that Driscoll does not teach or suggest the limitations of Claims 1 and 2 and that Fraser teaches away from the limitations of Claims 1 and 2. Accordingly, Applicants respectfully submit that Claims 1 and 2 are patentable over Driscoll, Jr., et al., Fraser, et al., and the combination of Driscoll, Jr. et al., with Fraser, et al.

Similarly, Claim 3 recites "wherein said one of a plurality of immersive video frames is apportioned into a plurality of portions in said standard television video frame". As explained

above, Driscoll does not apportion the immersive video frames and Fraser stores portions of the high-resolution image in multiple television frames. Therefore, Applicants respectfully submit that Claim 3 is patentable over Driscoll, Jr. et al., Fraser, et al., and the combination of Driscoll, Jr. et al., with Fraser, et al..

Furthermore, Applicants respectfully submit that Claims 4-16 and 20, which depend from Claims 1, 2, and/or 3, are patentable for at least the reasons given above with respect to Claims 1, 2, and 3.

Claims 21 and 22 are apparatus claims that are analogous to Claims 1 and 2. Specifically, Claims 21 and 22 recite:

an apportionment mechanism configured to apportion said one of said plurality of immersive video frames into a plurality of portions;

a portion storage mechanism configured to store each of said plurality of portions in a standard television video frame;

Thus, Applicants arguments presented above with respect to Claims 1 and 2 are also applicable to Claims 21 and 22. Thus, Applicants respectfully submit that Driscoll, Jr. et al. does not teach or suggest the limitations of Claims 21 and 22 and that Fraser teaches away from the limitations of Claims 21 and 22. Accordingly, Applicants respectfully submit that Claims 21 and 22 are patentable over Driscoll, Jr. et al., Fraser, et al., and the combination of Driscoll, Jr. et al., with Fraser, et al.

Similarly, Claim 23 recites "wherein said one of a plurality of immersive video frames is apportioned into a plurality of portions in said standard television video frame". As explained above, Driscoll does not apportion the immersive video frames and Fraser stores portions of the high-resolution image in multiple television frames. Therefore, Applicants respectfully submit that

Claim 23 is patentable over Driscoll, Jr. et al., Fraser, et al., and the combination of Driscoll, Jr. et al., with Fraser, et al.

Furthermore, Applicants respectfully submit that Claims 24-33 and 37, which depend from Claims 21, 22, and/or 23, are patentable for at least the reasons given above with respect to Claims 21, 22, and 23.

Claim 38 is a computer program product claim that is analogous to Claim 1 and 21. Specifically Claim 38 recites:

computer readable program code
configured to cause said computer to effect
an apportionment mechanism configured to
apportion said one of said plurality of
immersive video frames into a plurality of
portions

computer readable program code
configured to cause said computer to effect
a portion storage mechanism configured to
store each of said plurality of portions in
a standard television video frame

Thus, Applicants arguments presented above with respect to Claims 1 and 2 are also applicable to Claim 38. Thus, Applicants respectfully submit that Driscoll, Jr. et al. does not teach or suggest the limitations of Claims 21 and 22 and that Fraser teaches away from the limitations of Claim 38. Accordingly, Applicants respectfully submit that Claims 38 are patentable over Driscoll, Jr. et al., Fraser, et al., and the combination of Driscoll, Jr. et al., with Fraser, et al.

Furthermore, Applicants respectfully submit that Claims 39 and 43-47, which depend from Claim 38, are patentable for at least the reasons given above with respect to Claim 38.

Claim 48 recites "wherein said one of a plurality of immersive video frames is apportioned into a plurality of portions in said standard television video frame". As explained above, Driscoll does not apportion the immersive video frames and Fraser

stores portions of the high-resolution image in multiple television frames. Therefore, Applicants respectfully submit that Claim 48 is patentable over Driscoll, Jr. et al., Fraser, et al., and the combination of Driscoll, Jr. et al., with Fraser, et al.

Furthermore, Applicants respectfully submit that Claims 49-55, which depend from Claims 38 and/or 48, are patentable for at least the reasons given above with respect to Claims 38 and 48.

Conclusion

Claims 1-7, 14, 21-24, 34, 38, 39, 48, and 51 have been amended and Claims 17, 18, 19, 34, 35, 36, 40, 41, and 42 have been cancelled leaving Claims 1-16, 20-33, 37-39, and 43-55 pending. For the above reasons, Applicants respectfully request allowance of the pending Claims. Should the Examiner have any questions concerning this response, the Examiner is invited to call the undersigned at (408) 857-0559.

Respectfully submitted,

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